

**AMENDMENTS TO THE CLAIMS**

Claim 1. (currently amended) A digital broadcast receiving apparatus for receiving a broadcast signal generated by combining sub signals modulated using a PRBS (pseudo-random binary sequence)~~random sequence~~ generated based on an initial value set in accordance with a frequency of a broadcast channel by a signal transmission control use signal and a main signal generated based on information source data and reproducing the information source data contained in the received broadcast signal, having

a demultiplexing circuit for demultiplexing said main signal and sub signals in the received broadcast signal,

a random sequence generating circuit for generating a said PRBS (pseudo-random binary sequence) based on the initial value set in accordance with the frequency of said broadcast channel,

a sub signal reproduction circuit for reproducing said demultiplexed sub signals using said PRBS,

a control circuit for controlling the reproduction of said main signal in accordance with said reproduced demultiplexed sub signals, and

a decoding circuit for decoding said main signal under the control of said control circuit.

Claim 2. (original) A digital broadcast receiving apparatus as set forth in claim 1, wherein said broadcast signal is an OFDM (orthogonal frequency division multiplexing) modulated signal obtained by OFDM modulating said main signal and sub signals.

Claim 3. (original) A digital broadcast receiving apparatus as set forth in claim 1, wherein said information source data is sound data obtained by encoding a sound signal.

Claim 4. (original) A digital broadcast receiving apparatus as set forth in claim 1, wherein  
pilot signals are contained in said sub signals, and further having  
a correction circuit for correcting a distortion occurring in said main signal in accordance with a difference of said pilot signals detected by using said PRBS.

Claim 5. (original) A digital broadcast receiving apparatus as set forth in claim 1, wherein  
a transmission control signal is contained in said sub signals, and  
said control circuit controls the decoding operation of said decoding circuit in accordance with said transmission control signal reproduced by using said PRBS.

Claim 6. (currently amended) A digital broadcast receiving apparatus as set forth in claim 1, wherein  
the sub signals are modulated using the PRBS generated based on an initial value set in accordance with ~~the~~a sub channel number at ~~the~~a broadcasting side, and  
the control circuit sets an initial value for generating the PRBS in accordance with the sub channel number.

Claim 7. (currently amended) A digital broadcast receiving apparatus for receiving

a broadcast signal generated by combining a main signal comprised of a data series generated in accordance with information source data interleaved and encoded using a parameter set in accordance with a frequency of a broadcast channel and sub signals comprised of a signal transmission control use signals modulated using a predetermined random sequence and for reproducing said information source data contained in the received broadcast signal, having

a demultiplexing circuit for demultiplexing said main signal and sub signals in the received broadcast signal,

a deinterleaving circuit for deinterleaving said demultiplexed main signal using a the parameter set in accordance with the frequency of said broadcast channel, and

a decoding circuit for decoding said the deinterleaved main signal.

Claim 8. (currently amended) A digital broadcast receiving apparatus as set forth in claim 7, wherein

the parameter used for the interleaving on ~~the~~ a transmission side is set in accordance with the broadcast channel, and

further having a control circuit for setting said parameter in said deinterleaving circuit in accordance with the received broadcast channel.

Claim 9. (currently amended) A digital broadcast receiving apparatus as set forth in claim 7, wherein

the sub signals are modulated using ~~the~~ a PRBS (pseudo-random binary sequence) generated based on an initial value set in accordance with ~~the~~ a sub channel number at ~~the~~ a transmission side, and further having

a random sequence generating circuit for producing a PRBS based on the initial value set in accordance with the sub channel number and

a sub signal reproduction circuit for reproducing demodulated sub signals based on the PRBS.

Claim 10. (original) A digital broadcast receiving apparatus as set forth in claim 7, wherein said broadcast signal is an OFDM modulated wave.

Claim 11. (original) A digital broadcast receiving apparatus as set forth in claim 7, wherein said information source data is sound data obtained by encoding a sound signal.

Claim 12. (original) A digital broadcast receiving apparatus as set forth in claim 7, wherein

pilot signals are contained in said sub signals, and further having  
a correction circuit for correcting a distortion occurring in said main signal in accordance with a difference of said pilot signals detected by using ~~said a~~ PRBS (pseudo-random binary sequence).

Claim 13. (currently amended) A digital broadcast receiving apparatus as set forth in claim 7, wherein

a transmission control signal is contained in said sub signals, and  
said control circuit controls the operation of said decoding circuit in accordance with said transmission control signal reproduced by using said ~~pseudo~~ predetermined random sequence.

Claim 14. (currently amended) A digital broadcast receiving apparatus as set forth in claim 1, wherein said decoding circuit outputs an error signal when ~~said~~an error correction becomes disabled in accordance with ~~the~~a state of the received broadcast signal.

Claims 15-16. (canceled)

Claim 17. (currently amended) A digital broadcast receiving apparatus as set forth in claim 14, wherein said received broadcast signal is transmitted using a bandwidth of ~~a~~the frequency of the broadcast channel overlapping that of another channel and the initial value is changed based on ~~the~~a sub channel number of the other channel.